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ABSTRACT OF THE DISCLOSURE

The equivalent circuit is constructed such that a gate terminal is connected to a gate electrode of a P-channel MOS transistor as a varactor and a fixed capacitor is connected
5 between a substrate terminal having a substrate potential and the gate terminal. In addition, source and drain of the P-channel MOS transistor are commonly connected to a source/drain terminal to have the same potential and a first
10 voltage source is connected between the source/drain terminal and the substrate terminal so that the substrate terminal is connected to the positive terminal of the first voltage source. Accordingly, employment of the equivalent circuit of the present invention allows the simulation of
15 the C-V characteristic curve of a voltage-controlled variable capacitive element as an actual device with extremely high accuracy.